

CLAIMS

1. Device for spreading liquid binder and roadstone behind a road making machine (1) comprising at least one binder spreading rail (6) which is fixed to a rear portion of the road making machine (1), in a transverse direction, and having a first set of nozzles (7) for spreading binder which are distributed over the length of the rail (6) in the transverse direction with a constant spacing pitch (P) and which are directed towards a road surface (10), on which the road making machine (1) moves, and having adjustable means (4) for supplying the rail (6) with binder in order to supply all or some of the nozzles (7a) of the first set in order to form, at the outlet of each of the nozzles (7a), a flat jet (12) having an apex angle (α) such that, in accordance with height (H) of the rail (6) above the road surface (10), each jet (12) has an impact surface on the road surface (10) having a width of approximately three pitches in the transverse direction, and such that the jets (12) of the first set of nozzles overlap in such a manner that, for each of the successive pitches (13) of the impact surfaces of the jets (12), in the transverse direction, three jets (12) are superimposed, and a roadstone spreader (5) which is fixed to the rear of the road making machine (1), in a transverse arrangement facing the binder spreading rail (6), for spreading roadstone, comprising a plurality of flap-doors (8) which are of equal width and which are juxtaposed in the transverse direction and which are associated with control means (9), in order to open or close them, so as to allow or prevent the passage of a flow of roadstone (8') having a constant width of approximately three pitches at the road surface (10) for each of the flap-doors (8) and to adjust the total spreading width of the roadstone spreader (5) by all or some of the flap-doors (8) being opened, wherein:

- the binder spreading rail (6) further comprises a second set of nozzles (7b) which are each interposed between two successive nozzles (7a) of the first set of nozzles in the transverse direction and which are constructed so as to produce, when they are supplied with binder by the adjustable supply means (4) of the rail (6), a first half-jet and a second half-jet each, which jets are successive in the transverse direction and which each have an impact surface of a width substantially equal to one pitch in the transverse direction and which are adjacent at one side and the other of an axis (16) of the nozzle (7b) perpendicular to the transverse direction, the first half-jet (15a) which is located towards the end of the rail (6) having a flow rate substantially double the flow rate of the second half-jet (15b) which is located towards the central portion of the rail (6), and
- the means (4) for supplying the rail (6) with binder are provided in order to ensure a selective supply of nozzles (7b) of the second set with a flow rate substantially equal to the supply rate of the nozzles (7a) of the first set, so that spreading of roadstone and binder is brought about over a width of road surface (10) which is equal to a multiple of the spreading width of a flap-door (8), with two jets of binder being superimposed over one pitch (15c, 15d) at each of the ends of the width of road surface (10) and three jets (15, 12) being superimposed over all of the other central pitches (13) of the width of road surface (10), and with three jets of binder being spread for each of the spreading widths of a flow of roadstone (8') from a flap-door (8) of the roadstone spreader (5).

2. Device according to claim 1, wherein the flap-doors (8) of the roadstone spreader pour roadstone directly onto the

road surface (10), the spreading width of the flow of road-stone (8) from a flap-door (8) being substantially equal to the width of the flap-door (8) in the transverse direction.

3. Device according to claim 1, wherein the flap-doors (8) of the roadstone spreader are associated with at least one of a distributor roller (11), a metering roller or a feeder or counter-feeder, and in that the width of the flow of roadstone (8) over the road surface (10) is greater than the width of the flap-doors (8) of the roadstone spreader (5).

4. Device according to claim 1, wherein the nozzles of the first set (7a) and the nozzles of the second set (7b) are arranged on the same rail body (6).

5. Device according to claim 1, wherein the nozzles (7a) of the first set are arranged on a first rail body and the nozzles (7b) of the second set are arranged on a second rail body (6) which is parallel with the first rail body.

6. Device according to claim 1, wherein the nozzles (7b) of the second set are each arranged at an identical distance from the nozzles (7a) of the first set, between which they are interposed in the transverse direction.